# MINA J. BISSELL

Distinguished Scientist Lawrence Berkeley National Laboratory One Cyclotron Rd., 977-227 Berkeley, CA 94720 mjbissell@lbl.gov

**Education** 

Chemistry TransferredBryn Mawr College1959 – 1961B.A. (Honors) ChemistryRadcliffe/Harvard College1961 – 1963M.A. Bacteriology and BiochemistryHarvard University Medical School1963 – 1964Ph.D. Microbiology and Molecular GeneticsHarvard University Medical School1964 – 1969

## RESEARCH AND PROFESSIONAL EXPERIENCE:

## **Research Experience and Employment:**

Milton Fellow, Harvard Univ. (1969–70); American Cancer Society Fellow (1970–72); Staff Biochemist (1972–76); Senior Staff, LBNL (1976–); Faculty: Graduate Group in Comparative Biochemistry (1979–), Graduate Group in Endocrinology (2001–), Graduate Group in Molecular Toxicology (2002–), Univ. of Calif., Berkeley; Visiting Wellcome Prof., Kettering Inst., Univ. of Cincinnati Medical School (1986–88); Director, Cell & Molecular Biology Division, LBNL (1988–92); Director, Life Sciences Division (includes Cell & Molecular Biology Division), LBNL (1992–2002); Associate Director, Biosciences, (1995–2002).; Distinguished Scientist (Nov. 2002–); Senior Advisor to the Laboratory Director on Biology (Nov. 2002–); Member, UCSF Comprehensive Cancer Center, University of California, San Francisco (2006–); Faculty, Graduate Group in Bioengineering, University of California, Berkeley / University of California, San Francisco (2008–present).

**Awards and Honors (selected):** 

Medal for Top High School Student in the Country, Iran (1958); Medal of Amer. Inst. of Chemists for Top Chemistry Student at Radcliffe College (1962); Fogarty Senior Fellow (London, 1983–84); First Joseph Sadusk Award for Breast Cancer Research (1985); Guggenheim Fellow (Paris, 1992–93); ASCB Women in Cell Biology Career Recognition Award (1993); Elected AAAS Fellow (1994); E.O. Lawrence Award, US Dept. of Energy (1996); President, American Society of Cell Biology (ASCB, 1997); Elected, Inst. of Medicine of the National Acad. of Sciences (1997); Exceptional Service Award, OBER, US Dept. of Energy (1997); Mellon Award, University of Pittsburgh (1998); Eli Lily/Clowes Award of the American Association for Cancer Research (AACR, 1999); President, Int'l Society of Differentiation (ISD; 2000–2002); Honorary Doctorate, Pierre & Marie Curie University, Paris, France (2001); Innovator Award in Breast Cancer, US DoD (2002); Elected to the American Academy of Arts and Sciences (2002); Komen Foundation Brinker Award (2003); Discovery Health Channel Medical Honor (2004); Honorary Doctorate, University of Copenhagen (2004); Distinguished Scientist Fellowship Award, OBER, US Dept. of Energy (2005); Ted Couch Lectureship in Cancer Research and Award, H. Lee Moffitt Cancer Center and Research Institute (2007); Pezcoller Foundation—AACR International Award for Cancer Research (2007); Elected to the American Philosophical Society (2007); Inserm International Award (2007); FASEB - Excellence in Science Award (2008); Mina J. Bissell Award (2008) and more than 80 distinguished & named lectures.

National & International Committees and Review Boards (selected):

4 NIH study sections: Molecular Cytology (1981–85); Gerontology & Geriatrics Review (1987–89); Pathology B (1989–92) and Tumor Microenvironment (2005–current); Board of Directors, Gordon Conferences (1993–98); Chair, 2 Gordon Research Conferences and 2 Keystone Conferences (1993, 1996, 1998, 2005); Secretary of Energy's Advisory Committee BERAC (1995–99); Chair, BERAC Subcommittee on Application of Genome and Structural Biology (1995); Chair, NASA Committee on the Role of Animal Research in Space (1996–97); Integration Panel, U.S. Army Breast Cancer Research Program (1995–98); NCI Panel on "Preclinical Models of Cancer" (1997–98); Howard Hughes Medical Inst. Evaluation Panels, Washington, DC (1997/1999); Board of Directors, AACR (1999–2001); U.S. Representative to Council of Scientists, Human Frontier Science Program, Strasbourg, France (1998–2002); Advisory Committee, Burroughs Wellcome Career Awards (1998–2002); Univ. Chicago Cancer Research Center (1998–2000); Human Rights Committee of National Academies (1999–2005); External Advisory Committees: Instituto de Biologia Molecular e Celular (IBMC), Porto, Portugal (1999–); Institute of Defense Analysis, DSSG, Alexandria, VA (2000–); AACR Science Policy and Legislative Affairs Committees (2001–06); Scientific Advisory Boards: MIT Center for Environmental Health Sciences (2002–2004); Breakthrough Breast Cancer, London, UK (2002–); Susan Love Breast Cancer Research Foundation (2003–); NCI/NCAB Focus Group on Cancer in the Organism (2004); Salk Institute Grant Regulator Program Project (2005–); Chair, Group on Cancer and Cancer Biology of the IOM of The National Academies (2005–07); Nominating Committee, AACR (2006–2008); Euro Consortium for cancer stem cell research, Italy, Sweden, Denmark, UK (2007–); Italian National Cancer Institute, Rome, Italy (2007–); Member, Selection Committee for the Pezcoller Foundation-AACR International Award for Cancer Research (2007–08).

Associate Editor & Editorial Boards (current only):

Journal of Cell Science (2006—); Science (2005—); The FASEB Journal (2002—); International Journal of Cancer (1999—); Breast Cancer Research (1999—; Senior Editor: 2003—); Cancer Research (Senior Editor, 1999—2002); Molecular Medicine (1997—); Journal of Experimental Therapeutics and Oncology (1995—); Journal of Mammary Gland Biology (1995—); Cell Structure and Function (1994—); The Breast Journal (1994—); Molecular Carcinogenesis (1993—); In Vitro Cellular and Developmental Biology (1990—); Journal of Cellular Biochemistry (1990—).

Patents Issued: (5)

United States Patent # 6,753,154; United States Patent # 6,982,151; United States Patent # 5,846,536; United States Patent # 6,123,941 United States Patent # 6,287,790

Patent Pending: (10)

#### 2006

\*University of California, Los Angeles, CA (Pulmonary Grand Rounds); \*Vanderbilt-Ingram Cancer Center, Nashville, TN (Brooks Lecture); \*George Washington University, Washington, DC (Distinguished lecture); \*Memorial Sloan-Kettering Cancer Center, New York, NY (President's Research Seminar); \*Cancer Research UK Symposium (Keynote Lecture); \*Japanese Foundation for Cancer Research, Tokyo, Japan (Special Presentation); \*University of Miami, Miami, FL (Distinguished Lecture); \*Children's Memorial Research Center, Chicago, IL (Distinguished Lecture); \*French American Innovation Day, Boston, MA (Welcome Address, Moderator); \*National Jewish Medical and Research Center, Denver, CO (Distinguished Lecture); \*Karmanos Cancer Institute, Detroit, MI (Grand Round Seminar); \*Society for Basic Urologic Research, Phoenix, AZ (Keynote Lecture)

Other lectures: Mayo Clinic, Jacksonville, FL; Jonsson Comprehensive Cancer Center, University of California, Los Angeles, CA; BioScience Forum, San Francisco, CA; University of Texas, Southwestern Medical Center; oncology symposia, Oslo, Norway; FASEB meeting, San Francisco, CA; AACR, Washington, DC; Johns Hopkins University, Baltimore, MD; University of Connecticut Health Center, Hartford, CT; American Chemical Society, Santa Clara, CA; Osaka Bioscience Institute, Osaka, Japan; University of Washington - Fred Hutchinson Cancer Center, Seattle, WA; Gordon Research Conference on Basement Membranes, Il Ciocco, Italy; Roswell Park Cancer Institute, Buffalo, NY; Gordon Research Conference-Molecular Cell Biology, Tilton, NH; Biochemical Journal Centenary Symposium, Glasgow, UK; Cold Spring Harbor Laboratory, Cold Spring Harbor, NY; International Society for Oncodevelopmental Biology and Medicine, Pasadena, CA; Merck Research Laboratories, Boston, MA; Cancer Colloquium, St. Andrews, Scotland

#### 2007

- \* Ted Couch Award in Cancer Research, Tampa, FL (Award Lecture)
- \* J. David Gladstone Institutes, UCSF, San Francisco, CA (Distinguished Lecture)
- \* National Institutes of Health/National Cancer Institute, Bethesda, MD (CCR Grand Rounds)
- \* Symposium in Honor of Dr. Isaiah J. Fidler, Houston, TX (plenary)
- \* 3rd Annual Cell & Developmental Biology Spring Symposium, University of California, Berkeley, CA (plenary)
- \* Rosalind Franklin Society, New York, NY (plenary)
- \* Pezcoller Foundation-AACR International Award for Cancer Research Lecture, Los Angeles, CA (Award Lecture)
- \* Regina Elena Cancer Institute, Rome, Italy (Raffaele Recce Memorial Lecture)
- \* Venetian Institute of Molecular Medicine, Padova, Italy (Stanley Korsmeyer Lecture)
- \* American Thoracic Society, San Francisco, CA (plenary)
- \* Karolinska Institutet, Stockholm, Sweden (Novum Lecture)
- \* Salk Institute for Biological Studies, La Jolla, CA (plenary)
- \* Danish Cancer Society, Copenhagen, Denmark (plenary)
- \* Malmo Cancer Center, Malmo, Sweden (plenary)
- \* Breakthrough Research Center, Cambridge, UK (session chair)
- \* University of Pittsburgh, Pittsburgh, PA (Dai Nakada Memorial Lecture)
- \* The Australian Society for Medical Research, Sydney, Australia (Firkin Oration)
- \* Institut Curie, Paris, France (Servier-Curie Lecture)
- \* College of France, Paris, France (Inserm International Annual Award lecture)

Other lectures: BC Cancer Research Center, Vancouver, Canada; The Scripps Research Institute, La Jolla, CA; Stanford University, Stanford, CA; University of Cincinnati Cancer Center, Cincinnati, OH; University of New Mexico, Albuquerque, NM; Stanley Kimmel Cancer Center Conference, San Diego, CA; Princeton University, Princeton, NJ; University of Pennsylvania, Pittsburgh, PA; University of California, San Francisco, CA; Erasmus MC, Rotterdam, Netherlands; Stanford Cancer Center, Stanford, CA; NASA Space Radiation Investigators' Workshop, Rohnert Park, CA; FivePrime Therapeutics, San Francisco, CA; Halozyme Therapeutics, San Diego, CA; Cambridge Research Institute, Cambridge, UK; Washington University, St. Louis, MO; Pfizer Inc., Chesterfield, MO; University of California, Los Angeles, CA; Stanford University Department of Radiology, Stanford, CA; University of Melbourne, Melbourne, Australia; Institut Servier, Paris, France; GlaxoSmithKline, Collegeville, PA; Genentech, So. San Francisco, CA

# 2008

- \* University of Colorado, Aurora, CO (Distinguished Lecture)
- \* GABBA Symposium, Oporto, Portugal (Keynote Speaker)
- \* DOE Low Dose Radiation Research Investigators' Workshop, Washington, DC (Keynote Speaker)
- \* American Association for Cancer Research, San Diego, CA (session chair)

# (to be given)

- \* Cold Spring Harbor Laboratory, Long Island, NY (Keynote Speaker)
- \* Rockefeller University, New York, NY (Harvey Society Lecture)
- \* Keystone Symposium, Snowbird, UT (Co-organizer)
- \* American Society of Biochemistry and Molecular Biology, San Diego, CA (FASEB Excellence in Science Award lecture)
- \* University of Nebraska, Omaha, NE (Henry Lemon Memorial Lecture)
- \* Canadian Breast Cancer Research Alliance, Vancouver, Canada (plenary)
- \* Stony Brook University, Stony Brook, NY (plenary)
- \* Pezcoller Foundation, Trento, Italy (plenary)
- \* Gordon Research Conference, South Hadley, MA (plenary)
- \* Brazilian Society for Cell Biology, São Paulo, Brazil (Honorable Speaker)
- \* American Society for Bone and Mineral Research, Montreal, Canada (Gerald D. Aurbach Memorial Lecture)

- \* Karolinska Institutet, Stockholm, Sweden (Keynote Speaker)
- \* American Association for Cancer Research, Oahu, HI (Keynote Speaker)
- \* Salk Institute, La Jolla, CA (Marguerite Vogt Lecture on Cell Biology)
- \* American Society for Cell Biology, San Francisco, CA (session co-chair)

**Other lectures:** University of California, San Francisco, CA; National Cancer Institute, Bethesda, MD; (**to be given**) Fondation Ipsen, San Jose, Costa Rica; American Association for Cancer Research, San Diego, CA; Lawrence Berkeley National Laboratory, Berkeley, CA; University of São Paulo, Brazil; Mayo Clinic, Rochester, MN; University of Dundee, Scotland

# Selected Publications (selected since 1995; total 296)

- Rønnov-Jessen L, Petersen OW, Koteliansky VE and **Bissell MJ** (1995). The origin of the myofibroblasts in breast cancer. Recapitulation of tumor environment in culture unravels diversity and implicates converted fibroblasts and recruited smooth muscle cells. *J Clin Invest*. 1995 Feb; 95(2):859-73.
- 140. Boudreau N, Sympson CJ, Werb Z and **Bissell MJ** (1995). Suppression of ICE and apoptosis in mammary epithelial cells by extracellular matrix. *Science*. 1995 Feb 10; 267(5199):891-3.
- 143. Streuli CH, Schmidhauser C, Bailey N, Yurchenco P, Skubitz AP, Roskelley C and **Bissell MJ** (1995). Laminin mediates tissue-specific gene expression in mammary epithelia. *J Cell Biol*. 1995 May; 129(3):591-603.
- 156. Rønnov-Jessen L, Petersen OW and **Bissell MJ** (1996). Cellular changes involved in conversion of normal to malignant breast: importance of the stromal reaction. *Physiol Rev.* 1996 Jan; 76(1):69-125.
- 166. Weaver VM, Petersen OW, Wang F, Larabell CA, Briand P, Damsky C and **Bissell MJ** (1997). Reversion of the malignant phenotype of human breast cells in three-dimensional culture and in vivo by integrin blocking antibodies. *J Cell Biol.* 1997 Apr 7; 137(1):231-46 (cover feature).
- 167. Lochter A, Galosy S, Muschler J, Freedman N, Werb Z and **Bissell MJ** (1997). Matrix metalloproteinase stromelysin-1 triggers a cascade of molecular alterations that leads to stable epithelial-to-mesenchymal conversion and a premalignant phenotype in mammary epithelial cells. *J Cell Biol.* 1997 Dec 29; 139(7):1861-72.
- 171. Myers CA, Schmidhauser C, Mellentin-Michelotti J, Fragoso G, Roskelley CD, Casperson G, Mossi R, Pujuguet P, Hager G and **Bissell MJ** (1998). Characterization of BCE-1: A transcriptional enhancer regulated by prolactin and extracellular matrix and modulated by the state of histone acetylation. *Mol Cell Biol*. 1998 Apr; 18(4):2184-95.
- 177. Thomasset N, Lochter A, Sympson CJ, Lund LR, Williams DR, Behrendtsen O, Werb Z and **Bissell MJ** (1998). Expression of autoactivated stromelysin-1 in mammary glands of transgenic mice leads to a reactive stroma during early development. *Am J Pathol.* 1998 Aug; 153(2):457-67
- 180. Lelièvre SA, Weaver VM, Nickerson JA, Larabell CA, Bhaumik A, Petersen OW and **Bissell MJ** (1998). Tissue phenotype depends on reciprocal interactions between the extracellular matrix and the structural organization of the nucleus. *Proc Natl Acad Sci USA*. 1998 Dec 8; 95:14711-6.
- 181. Wang F, Weaver VM, Petersen OW, Larabell CA, Dedhar S, Briand P, Lupu R and **Bissell MJ** (1998). Reciprocal interactions between β1-integrin and epidermal growth factor receptor in three-dimensional basement membrane breast cultures: A different perspective in epithelial biology. *Proc Natl Acad Sci USA*. 1998 Dec 8; 95:14821-6.
- 185. Péchoux C, Gudjonsson T, Rønnov-Jessen L, **Bissell MJ** and Petersen OW (1999). Human mammary luminal epithelial cells contain progenitors to myoepithelial cells. *Dev Biol.* 1999 Feb 1; 206:88-99.
- 188. **Bissell MJ**, Weaver VM, Lelièvre SA, Wang F, Petersen OW and Schmeichel KL (1999). Tissue structure, nuclear organization and gene expression in normal and malignant breast. *Cancer Res.* 1999 Apr 1; 59:1757-64.
- 189. Sternlicht MD, Lochter A, Sympson CJ, Huey B, Rougier JP, Gray JW, Pinkel D, **Bissell MJ** and Werb Z (1999). The stromal proteinase MMP-3/stromelysin-1 promotes mammary carcinogenesis. *Cell*. 1999 Jul 23; 98(2):137-46.
- 191. Muschler J, Lochter A, Roskelley CR, Yurchenco P and **Bissell MJ** (1999). Division of labor among the α6β4 integrins, and an E3 laminin receptor to signal morphogenesis and β-casein expression in mammary epithelial cells. *Mol Biol Cell*. 1999 Sep; 10(9):2817-28.
- 203. Hirai Y, Radisky D, Boudreau R, Simian M, Stevens M, Oka Y, Takebe K, Niwa S and **Bissell MJ** (2001). Epimorphin mediates mammary luminal morphogenesis through control of C/EBPβ. *J Cell Biol*. 2001 May 14; 153(4):785-94.
- 204. Simian M, Hirai Y, Navre M, Werb Z, Lochter A and **Bissell MJ** (2001). The interplay of matrix metalloproteinases, morphogens and growth factors is necessary for branching of mammary epithelial cells. *Development*. 2001 Aug; 28:3117-31.
- 205. Muthuswamy SK, Li D, Lelièvre SA, **Bissell MJ** and Brugge JS (2001). Erbβ2, but not Erbβ1, reinitiates proliferation and induces luminal repopulation in epithelial acini. *Nat Cell Biol.* 2001 Sep; 3(9):785-93.
- 206. Bissell MJ and Radisky D (2001). Putting tumours in context. Nat Rev Cancer. 2001 Oct; 1(1):46-54.
- 210. Gudjonsson T, Rønnov-Jessen L, Villadsen R, Rank F, **Bissell MJ** and Petersen OW (2002). Normal and tumor-derived myoepithelial cells differ in their ability to signal to luminal breast epithelial cells for polarity and basement membrane deposition. *J Cell Sci.* 2002 Jan 1; 115(1):39-50.
- 212. Gudjonsson T, Villadsen R, Nielsen HL, Rønnov-Jensen L, **Bissell MJ** and Petersen OW (2002). Isolation, immortalization, and characterization of a human breast epithelial cell line with stem cell properties. *Genes Dev.* 2002 Mar 15; 16(6):693-706.
- 214. Weaver VM, Lelièvre SA, Lakins JN, Chrenek MA, Jones JCR, Giancotti F, Werb Z and **Bissell MJ** (2002). β4 Integrindependent formation of polarized three-dimensional architecture confers resistance to apoptosis in normal and malignant mammary epithelium. *Cancer Cell*. 2002 Sep; 2:205-16; Also see *News & Views, Nature*. 419:790-1 (2002). *Minireview (Cell)* 111:923-5.
- Wang F, Hansen RK, Radisky D, Yoneda T, Barcellos-Hoff MH, Petersen OW, Turley EA and **Bissell MJ** (2002). Phenotypic reversion or death of cancer cells by altering signaling pathways in three-dimensional contexts. *J Natl Cancer Inst.* 2002 Oct 2; 94(19):1494-503.

- 217. Muschler J, Levy D, Boudreau R, Henry M, Campbell K and **Bissell MJ** (2002). A role for dystroglycan in epithelial polarization: Loss of function in breast tumor cells. *Cancer Res.* 2002 Dec 1; 62(23):7102-9.
- 224. Schmeichel, KL and **Bissell MJ** (2003). Modeling tissue-specific signaling and organ function in three dimensions. *J Cell Sci.* 2003 Jun 15; 116:2377-88.
- 226. Novaro V, Roskelley C and **Bissell MJ** (2003). Collagen-IV and laminin-1 regulate estrogen receptor alpha expression and function in mouse mammary epithelial cells. *J Cell Sci.* 2003 Jul 15; 116(14) 2975-86.
- 240. Liu H, Radisky DC, Wang F and **Bissell MJ** (2004). Polarity and proliferation are controlled by distinct signaling pathways downstream of PI3-kinase in breast epithelial tumor cells. *J Cell Biol*. 2004 Feb 16; 164(4):603-12.
- 246. **Bissell MJ**, Kenny PA and Radisky D (2005). Microenvironmental regulators of tissue structure and function also regulate tumor induction and progression: the role of extracellular matrix and its degrading enzymes. *Cold Spring Harbor Symposia on Quantitative Biology, Symposium 70*, pp. 343-56.
- 248. **Bissell MJ** and LaBarge MA (2005). Context, tissue plasticity, and cancer: Are tumor stem cells also regulated by the microenvironment? *Cancer Cell*. 2005 Jan; 7:17-23.
- 253. Radisky DC, Levy DD, Littlepage LE, Liu H, Nelson CM, Fata JE, Leake D, Godden EL, Albertson DG, Nieto MA, Werb Z and **Bissell MJ** (2005). Rac1b and reactive oxygen species mediate MMP-3-induced EMT and genomic instability. *Nature*. 2005 Jul 7; 436(7047):123-7.
- 257. Bascom JL, Fata JE, Hirai Y, Sternlicht MD and **Bissell MJ** (2005). Epimorphin overexpression in the mouse mammary gland promotes alveolar hyperplasia and mammary adenocarcinoma. *Cancer Res.* 2005 Oct 1; 65:8617-21.
- 262. Park CC, Zhang H, Pallavicini M, Gray JW, Baehner F, Park CJ and **Bissell MJ** (2006). β1 integrin inhibitory antibody induces apoptosis of breast cancer cells, inhibits growth, and distinguishes malignant from normal phenotype in three dimensional cultures and in vivo. *Cancer Res.* 2006 Feb 1; 66(3):1526-35.
- 263. Liu H, Radisky DC, Nelson CM, Zhang H, Fata J and **Bissell MJ** (2006). Mechanism of Akt1 inhibition of breast cancer cell invasion reveals a protumorigenic role for TSC2. *Proc Natl Acad Sci USA*. 2006 Mar 14; 103(11):4134-9.
- 266. Fournier MV, Martin KJ, Kenny PA, Xhaja K, Bosch I, Yaswen P and **Bissell MJ** (2006). Gene expression signature in organized and growth-arrested mammary acini predicts good outcome in breast cancer. *Cancer Res.* 2006 Jul 15; 66(14):7095-102
- Nelson CM, van Duijn M, Inman JL, Fletcher DA and Bissell MJ (2006). Tissue geometry determines sites of branching morphogenesis in organotypic cultures. *Science*. 2006 Oct 13; 314(5797):298-300.
- 270. Kenny PA, Lee GY, Myers CA, Neve RM, Semeiks JR, Spellman PT, Lorenz K, Lee EH, Barcellos-Hoff MH, Petersen OW, Gray JW and Bissell MJ (2007). The morphologies of breast cancer cell lines in three-dimensional assays correlate with their profiles of gene expression. *Molecular Oncology*. 1(1): 84-96
- 274. Kenny PA and **Bissell MJ** (2007). Targeting TACE-dependent EGFR-ligand shedding in breast cancer. *J Clin Invest*. 2007 Feb; 117(2):337-45.
- 278. Villadsen R, Fridriksdottir AJ, Rønnov-Jessen L, Gudjonsson T, Rank F, Labarge MA, **Bissell MJ** and Petersen OW (2007). Evidence for a stem cell hierarchy in the adult human breast. *J Cell Biol*. 2007 Apr 9; 177(1):87-101.
- 281. Itoh M, Nelson CM, Myers CA and **Bissell MJ** (2007). Rap1 integrates tissue polarity, lumen formation, and tumorigenic potential in human breast epithelial cells. *Cancer Res*. 2007 May 15; 67(10):4759-66 (cover feature).
- 282. Xu R, Spencer VA and **Bissell MJ** (2007). Extracellular matrix-regulated gene expression requires cooperation of SWI SWI/SNF and transcription factors. *J Biol Chem.* 2007 May 18; 282(20):14992-9.
- 283. Fata JE, Mori H, Ewald AJ, Zhang H, Yao E, Werb Z and **Bissell MJ** (2007). The MAPK(ERK-1,2) pathway integrates distinct and antagonistic signals from TGFα and FGF7 in morphogenesis of mouse mammary epithelium. *Dev Biol.* 2007 Jun 1; 306(1):193-207.
- 286. LeBeyec J, Xu R, Lee SY, Nelson CM, Rizki A, Alcaraz J and **Bissell MJ** (2007). Cell shape regulates global histone acetylation in human mammary epithelial cells. *Exp Cell Res*. 2007 Aug 15; 313:3066-75.
- 287. Andarawewa KL, Erickson AC, Chou WS, Costes SV, Gascard P, Mott JD, **Bissell MJ** and Barcellos-Hoff MH (2007). Ionizing radiation predisposes nonmalignant human mammary epithelial cells to undergo transforming growth factor beta induced epithelial to mesenchymal transition. *Cancer Res.* 2007 Sep 15; 67(18):8662-70.
- 289. Rizki A, Mott JD and **Bissell MJ** (2007). Polo-like kinase 1 is involved in breast cancer cell invasion through extracellular matrix. *Cancer Res.* 2007 Dec 1; 67(23):11106-10.
- 290. Rizki A, Weaver VM, Lee SY, Rozenberg GI, Chin K, Myers CA, Bascom JL, Mott JD, Semeiks JR, Grate LR, Mian IS, Borowsky AD, Jensen RA, Idowu MO, Chen F, Chen DJ, Petersen OW, Gray JW and **Bissell MJ** (2008). A human breast cell model of preinvasive to invasive transition. *Cancer Res.* 2008 Mar 1; 68(5):1378-87.
- 294. Nelson C, Inman J and **Bissell MJ** (2008). Three-dimensional lithographically-defined organotypic tissue arrays for quantitative analysis of morphogenesis and neoplastic progression. *Nature Protocols*. In Press.
- 295. Hu M, Yao J, Carroll DK, Weremowicz S, Chen H, Carrasco D, Richardson A, Violette S, Nikolsky Y, Bauerlein EL, Hahn WC, Gelman RS, Allred C, **Bissell MJ**, Schnitt S and Polyak K (2008). Regulation of in situ to invasive breast carcinoma transition. *Cancer Cell*. In Press.
- 296. Faddy HM, Smart CE, Xu R, Lee GY, Kenny PA, Feng M, Rao R, Bronw MA, **Bissell MJ** and Roberts-Thomson SJ (2008). Localization of plasma membrane and secretory calcium pumps in the mammary gland. *Biochem Biophys Res Comm.* In Press.